

ASTRONOMER HARKNESS DEAD.

Retired Rear Admiral of the United States, Who Had Charge of the Observatory in Washington.

Rear Admiral William Harkness, United States Navy, retired, died of typhoid fever yesterday in his home, at 90 Mercer Street, Jersey City. He was spoken of as one of the most noted astronomers. He was born in Ecklefechan, Scotland, on Dec. 17, 1837. He was a son of the Rev. James Harkness, a Presbyterian minister, who came to this country in 1840 and settled in Jersey City, where he became pastor of the Third Presbyterian Church. He died about thirty years ago.

William Harkness was educated in the University of Rochester, N. Y., and was graduated in 1858, and he studied medicine in the Homeopathic College, New York. He was appointed an aide in the United States Naval Observatory in 1862 and afterward he served as a Surgeon in the field during the civil war, notably at the second battle of Bull Run.

From Oct. 17, 1865, to Sept. 8, 1866, he served on board the monitor Monadnock, which was sent from Philadelphia to San Francisco, his duty being to make observations as to the effect of iron-clads on compasses. He was appointed to the Hydrographic Office in 1867 and was afterward transferred to the Naval Observatory, where he remained until 1874. He was made a Commander on May 31, 1872, and assigned to the United States steamship Swatara. On June 3, 1874, he accompanied the commission sent to Hobart, Tasmania, to observe the transit of Venus.

He was the inventor of the spherimeter caliper for calculating the figure of a pivot. In 1879 he discovered the theory of the focal curve of the achromatic telescope. He was made a Captain in the navy in 1878, and in the same year he was sent to Austin, Texas, to observe the transit of Mercury, and later to Creston, N. Y., to observe the solar eclipse. He had observed the solar eclipse of Aug. 7, 1869, at Des Moines, Iowa, at which time he discovered corona line K 1,474.

He mounted all of the instruments in the new Naval Observatory, Washington. On Oct. 21, 1892, he was appointed Assistant Superintendent of the Naval Observatory, and on Sept. 21, 1894, he was made Astronomical Director. On June 30, 1897, he was appointed Director of the Nautical Almanac. On Dec. 17, 1899, he was retired on account of age, with the rank of Rear Admiral. He was a member of many scientific associations, and in 1893 was President of the American Association for the Advancement of Science. He never was married. He made his home with a brother and two sisters.